

Title (en)

Preparation of carboxylic acids and esters thereof.

Title (de)

Herstellung von Carbonsäuren und deren Estern.

Title (fr)

Préparation d'acides carboxyliques et leurs esters.

Publication

EP 0106656 A1 19840425 (EN)

Application

EP 83306161 A 19831012

Priority

- GB 8229988 A 19821020
- GB 8300888 A 19830113

Abstract (en)

A carboxylic acid or an ester thereof having at least two carbon atoms more than formic acid is prepared by reacting at elevated temperature e.g. 100 to 250 °C formic acid or a formate ester with an olefin e.g. ethylene in the presence of, as catalyst, a Group VIII noble metal e.g. iridium, preferably promoted by iodide, to cause addition of the formic acid or ester to the olefin and form the a higher acid e.g. propionic acid or ester thereof. A strong acid such as a sulphonic acid may be used as a copromoter. The catalyst is employed in solution.

IPC 1-7

C07C 53/122; C07C 53/126; C07C 51/353; C07C 69/24; C07C 67/38

IPC 8 full level

C07C 51/353 (2006.01); **C07C 67/38** (2006.01)

CPC (source: EP US)

C07C 51/353 (2013.01 - EP US); **C07C 67/38** (2013.01 - EP US)

Citation (search report)

- DE 1915431 A1 19700129 - ARMOUR IND CHEM CO
- GB 1098465 A 19680110 - CELANESE CORP
- US 3944603 A 19760316 - MORRIS DONALD E
- US 201338 A 19350903 - CARPENTER GILBERT B
- FR 1484367 A 19670609 - DISTILLERS CO YEAST LTD
- [X] KINETICS AND CATALYSIS, vol. 13, no. 1, part 1, January-February 1972, New York I.S. KOLOMNIKOV et al "Addition of formic acid and aldehydes to olefins catalyzed by transition metal complexes"

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